



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

7/25/05

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,335	08/29/2001	William H. Blum	MOT-D2442	5944
24375	7590	09/12/2005	EXAMINER	
VOLPE AND KOENIG, P.C.			HAMANN, JORDAN J	
DEPT. MOT			ART UNIT	PAPER NUMBER
UNITED PLAZA, SUITE 1600			2667	
30 SOUTH 17TH STREET				
PHILADELPHIA, PA 19103				
DATE MAILED: 09/12/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/941,335	BLUM, WILLIAM H.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jordan Hamann	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 29 August 2001.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-16 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-16 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 29 August 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1/8/02 &amp; 12/30/02</u>	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: page 9 reference sign 457 and page 11 reference sign 420. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The disclosure is objected to because of the following informalities: on page 5 line 1 "160a-60d" appears to have been meant to be "160a-160d" and on page 9 paragraph 37 the phrase "As previously stated herein, the RFC 2833", however RFC 2833 is not previously mentioned in the specification.

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." On page 4 paragraph 25 "With reference to the

drawings, in general, and FIGS. 1 through 5B in particular". The terms general and particular imply that other drawings are present but will not be used to describe the invention.

Appropriate correction is required.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "the bearer channel traffic". There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 and 8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Chapman et al (US 6,785,301).

With respect to claim 1 Chapman discloses a method for interfacing a Public Switched Telephone Network (PSTN) (Figure 1 Element 16) with a Voice over IP (VoIP) enabled access network (Figure 1 Element 24) comprising the steps of:

- (a) receiving incoming call signaling from a PSTN, wherein the incoming call signaling is in a digital trunk format (Figure 3 Element 50);
- (b) converting the call signaling to a packet-based VoIP call signaling message stream (Figure 5 Element 22); and
- (c) transmitting the packet based VoIP call signaling stream to a VoIP receiving device (Figure 5 Elements 24 and 90).

With respect to claim 2 Chapman discloses the method of claim 1, further comprising the steps of:

- (d) receiving the packet-based VoIP call signaling at a VoIP receiving device (Figure 5 Elements 100 and 102), and
- (e) generating signaling compatible with a residential PSTN phone device (Figure 5 Element 102).

With respect to claim 3 Chapman discloses the method of claim 1, wherein the incoming call is in a GR-303 format (column 2 lines 5-8).

With respect to claim 4 Chapman discloses the method of claim 1, wherein the incoming call signaling is in an ETSI V5 interface format (column 2 lines 5-8).

With respect to claim 8 Chapman discloses a system for interfacing a Public Switched Telephone Network (PSTN) (Figure 1 Element 16) with a Voice over IP (VoIP) enabled access network (Figure 1 Element 24), comprising:

- a local digital switch (LDS) application (Figure 5 Element 18) for a receiving incoming call signaling from a PSTN, wherein the incoming call signaling is in a digital trunk format (Figure 3 Element 50);
- a converter for converting the call signaling to a packet-based VoIP call signaling message stream (Figure 5 Element 22); and
- a VoIP application for transmitting the packet based VoIP call signaling stream to a VoIP receiving device (Figure 5 Elements 24 and 90).

With respect to claim 9 Chapman discloses the system of claim 8, whereby the VoIP application receives the packet-based VoIP call signaling and the LDS application generates signaling compatible with a residential PSTN phone device (Figure 5 Elements 100 and 102).

With respect to claim 10 Chapman discloses the system of claim 8, wherein the incoming call is in a GR-303 format (column 2 lines 5-8).

With respect to claim 11 Chapman discloses the method of claim 8, wherein the incoming call signaling is in an ETSI V5 interface format (column 2 lines 5-8).

Claim 16 is rejected under 35 U.S.C. 102(e) as being anticipated by Butler (U.S 6,873,689).

Butler discloses an internet protocol digital terminal for interfacing a Public Switched Telephone Network (PSTN) with a Voice over IP (VoIP) enabled network, comprising:

    a first interface for receiving TDMA communications comprising voice and signaling information from said PSTN and providing the voice and signaling information to a converter (column 4 lines 23-26); and

    for receiving voice and signaling information from said converter and for transmitting TDMA communications to said PSTN (column 4 lines 39-48);

    a second interface for receiving VoIP communications comprising voice and signaling information from said VoIP enabled network and providing voice and signaling information to said converter (column 4 lines 27-28); and

    for receiving voice and signaling information from said converter and transmitting said voice and signaling information to said VOIP enabled network (column 4 lines 39-38);

    whereby said converter converts TDMA-based voice and signaling information to VoIP-based voice and signaling information and converts VOIP -based voice and signaling information to TDMA-based voice and signaling information (column 4 lines 39-48).

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-7 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shankar et al (US 6,570,869).

With respect to claim 5 Shankar discloses a method for transporting ring control signals between a PSTN and a VoIP enabled access network comprising the steps of:

- (a) receiving robbed bit signaling from a PSTN, wherein the robbed bit signaling contains the ring control signals
- (b) converting the robbed bit signaling to specialized packets in a VoIP signaling stream without parsing the robbed bit signaling to produce a high level ring command
- (c) transmitting the specialized packets over a VoIP enabled access network.

(column 4 lines 50-54).

Shankar does not expressly disclose the method to minimize delay and maintain caller ID timing as stated in the preamble of claim 5, however minimizing delay is a common objective of any packet switched network where audio is carried and the method of Shankar applies to all channel associated signaling (CAS) and as such includes caller ID signaling. In addition Shankar discloses in column 5 lines 59-63 that a voice call originated from or terminated by a legacy systems is seamlessly established over the packet switching network and that is interpreted as including caller ID timing.

With respect to claim 6 Shankar discloses the method of claim 5, see 103 rejection above, further comprising the steps of:

- (d) receiving the specialized packets at a VoIP enabled device; and

(e) converting the specialized packets to a series of PSTN end user device compatible signals. (column 5 lines 15-19).

With respect to claim 7 Shankar discloses the method of claim 5, see 103 rejection above, however does not expressly disclose wherein the timing relationship between the robbed bit signaling and the bearer channel traffic is sustained. However, in column 5 lines 59-63 Shankar discloses that a voice call originated from or terminated by a legacy systems is seamlessly established over the packet switching network and that is interpreted as sustaining the timing relationship between the robbed bit signaling and the bearer channel traffic.

With respect to claim 13 Shankar discloses a system for transporting ring control signals between a PSTN and a VoIP enabled access network comprising:

a local digital switch (LDS) application for receiving robbed bit signaling from PSTN, wherein the robbed bit signaling contains the ring control signals;

a converter for converting the robbed bit signaling to specialized packets in a VoIP signaling stream without parsing the robbed bit signaling to produce a high level ring command; and

a VoIP application for transmitting the specialized packets over said VoIP enabled access network (column 4 lines 50-54).

Shankar does not expressly disclose the method to minimize delay and maintain caller ID timing as stated in the preamble of claim 13, however minimizing delay is a common objective of any packet switched network where audio is carried and the method of Shankar applies to all channel associated signaling (CAS) and as such

includes caller ID signaling. In addition Shankar discloses in column 5 lines 59-63 that a voice call originated from or terminated by a legacy systems is seamlessly established over the packet switching network and that is interpreted as including caller ID timing.

With respect to claim 14 Shankar discloses the system of claim 13, see 103 rejection above, whereby the VoIP application receives the specialized packets and the converter converts the specialized packets to a series of PTSN end user device compatible signals (column 5 lines 15-19).

With respect to claim 15 Shankar discloses the system of claim 13, whereby the converter further includes a signaling converter for processing control signals and a voice converter for processing voice signals (column 2 lines 53-55).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman et al (US 6,785,301) in view of Shankar et al (US 6,570,869).

Chapman discloses the system of claim 8, see 102 rejection above, however does not expressly disclose whereby the converter further includes a signaling converter for processing control signals and a voice converter for processing voice signals.

Shankar discloses converter including a signaling converter for processing control signals and a voice converter for processing voice signals (column 2 lines 53-55).

Chapman and Shankar are analogous are because they are from the same field of endeavor, namely communicating voice and voice signaling from a circuit switched network over a packet switched network.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to separate the voice converter from the signaling converter.

The motivation for doing so would have been a flexible solution for integrating with legacy systems (column 2 lines 53-55).

Therefore it would have been obvious to combine Shankar with Chapman for the benefit of separated converters for processing voice and control signals for the benefit of a flexible solution for integrating with legacy systems to obtain the invention as specified in claim 12.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sucharczuk (US 6,018,525) discloses a method for transporting a voice band signal with channel-associated signaling over an ATM system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordan Hamann whose telephone number is (571) 272-8564. The examiner can normally be reached on Monday-Friday 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JJH

  
CHI PHAM  
SUPERVISORY PATENT EXAMINEE  
TECHNOLOGY CENTER 2800  
9/6/85